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DESCRIPTION

OF THE

Copper Creek Mining Location,

IN

DOUGLAS COUNTY,

WISCONSIN.

1867.15

BOSTON:
PRESS OF GEO. C. RAND & AVERY, 3 CORNHILL.
1863.

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by Geo. R. Stuntz
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entered.
Jan 29, 1903

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COPPER CREEK MINING LOCATION.

This location embraces the east half of the southeast quarter of Section 15, and the west half of the southwest quarter of Section 14, in Township 47, Range 14 west, being 160 acres in Douglas County, Wisconsin. It is about thirteen and one-half miles by the County road from the town and harbor of Superior, and at an elevation of 300 feet above the level of the lake.

The Aminecon Trap Range, in crossing it from southwest to northeast, is cut by Copper Creek, a rapid and never-failing stream, exposing at several points veins of native copper.

These surface exposures attracted, at an early day, the attention of the agents of the American Fur Company, then the only civilized occupants of that part of the country, and in the years 1846 and 1847 some attempts at mining were made under their direction. A particular description of their operations will be found in another part of this pamphlet. As they had no title to the land and were working at great expense in a region which was at that time wholly remote from civilization, it is not surprising that, like many other pioneers in Lake Superior copper-mining, they abandoned their enterprise, or postponed it to a more convenient season.

Eight years afterwards, the whole southern shore of Lake Superior had ceased to be exclusively known to hunters and trappers. The land had been surveyed and brought into market, and settlements had extended to the extreme western end of the lake.

The Copper Creek location was then entered under a preëmption claim by J. H. C. McKinzey, and after a litigation at the Land Office with a rival preëmptor in the interest of members of the Fur Company (who now made a persistent effort to secure a title to the land), McKinzey's claim was sustained, and a patent was duly issued to him. From him the title passed, with but one intervening link, to the present proprietor.

The location has been visited from time to time by explorers, practical miners, and geologists; numerous rich specimens have been taken from it, and it has long been reputed to be the most promising mining location west of Ontonagon. During the past season a regular exploration has been made upon it, with the view of ascertaining more definitely its value for mining purposes.

A Report of this exploration is presented herewith. Mr. George R. Stuntz, under whose superintendence it was conducted, is an explorer of great experience, with a knowledge of the geological formations characteristic of the copper-bearing districts of Lake Superior, acquired by careful study in the field. He was the original surveyor, under government contract, of the whole Wisconsin shore of the lake, and has, perhaps, a more thorough acquaintance with that region than any person who could be named. His Report is a plain statement of facts, and as the under-

signed was himself present and taking part in the exploration, he is able to vouch for its accuracy. In connection with the maps, and with the specimens to which it refers (which were marked and packed on the ground by the writer's own hand), it will furnish a correct idea of the character of the location.

It will be seen that there are three well-defined veins, two of which, including the one from which the richest specimens were obtained, run with the formation. This last-mentioned lode rests upon a foot-wall of conglomerate, resembling in this respect one of the most productive veins of the Minnesota mine. Although only three veins have been actually traced, there is reason to believe that others would be discovered by a further exploration, as many points inviting examination were passed by, owing to the lateness of the season.

The facilities furnished by Copper Creek for stamping purposes will be apparent from an inspection of the map. The town of Superior, having a good harbor, with piers and warehouses, erected by private enterprise, presents every convenience for shipping copper and obtaining supplies. Beef cattle, driven over from Minnesota, on the military road, can be purchased here much cheaper than at the Michigan mines, which are now largely supplied from this point. Pork can be advantageously procured in the same way. Another advantage is found in the price of lumber, an article for which the pineries and saw-mills in this region now find a market at the lower mines. One of the finest bodies of pine in the northwest is found on the Brulé and Iron Rivers, about twenty-four miles east of this point.

With reference to the transportation between Superior and Copper Creek, it may be mentioned that, besides the wagon road (which is now available during the winter, and at no great expense can be made so at all times), the Nemadji River which, at ordinary stages of water is navigable for small boats to a point within four miles of the location, affords an additional route.

There is reason to believe that the whole country at the westerly end of Lake Superior will receive a new stimulus to its development before many years, by the opening of railroad communication with the Mississippi River, an enterprise which is becoming an absolute necessity to the interests of Minnesota. Meanwhile communication is kept open by means of the Point Douglas military road and a regular line of stages between St. Paul and Superior, which place is thus rendered accessible at all seasons.

JAMES O. SARGENT.

Boston, Dec. 8th, 1863.

REPORT OF EXPLORATION.

(ACCOMPANYING SPECIMENS.)

SUPERIOR, Oct. 17, 1863.

JAMES O. SARGENT, ESQ.

SIR: Under instructions from you, I have made a survey of the east half of the southeast quarter of Section 15, and the west half of the southwest quarter of Section 14, Township 47 north, Range 14 west, in Douglas county, Wisconsin, and have explored the same as thoroughly as the limited time and the small force under my direction would permit.

I herewith submit a copy of the field-notes of the survey, and a map of the location.

In making the exploration I had the services of Mr. George Walker, an English miner, who has had several years' experience in the various copper mines on this lake.

The tract is thickly timbered with spruce, fir, aspen, sugar, oak, white pine, and birch. This timber is small in size.

The Aminecon Trap Range crosses the location. This Range makes its appearance above the sandstone on the east side of Township 48 north, Range 12 west, about the middle of the township, runs in a southeasterly course across the township, and across

Township 47, Range 13, Township 47, Range 14, Township 46, Range 15, and leaves Wisconsin. It is cut by the Aminecon River, Copper Creek, and Black River, and numerous small streams. Throughout the extent described it gives promise of being a productive mining district.

Two small streams unite near the centre of the location, forming Copper Creek, which runs in a northwest direction, and leaves the tract about twenty rods south of the northwest corner. Owing to the extremely dry season, this stream was lower at the time of my examination than it has been known to be in ten years; but it affords at all times abundance of water for the purposes of a mine employing steam power.

By a measurement, taken October 1st, I found the amount of water passing through it to be $58\frac{5}{10}$ cubic feet per minute, and this is very much below the average. In ordinary seasons the amount of fall in the stream (which is from fifty to a hundred feet within the location) would give a water *power* sufficient for all the purposes of a mine.

From my examination I believe that there are three veins, as represented in the map, in all of which we obtained native copper.

Vein No. 1 shows a breast in the east bank of the west branch of the stream, of nearly twenty feet wide, and bears south twenty-four degrees west. The specimens taken from this locality are numbered, and, as you will perceive, exhibit a quality of vein-stone which gives promise of productiveness. This vein has been traced to the southwest and adjoining location. It dips to the southeast at an angle of thirty-three de-

grees. The productive part of the lode lies upon the foot-wall, specimens of which I furnish with this Report, as also of the hanging wall.

Vein No. 2 shows a breast of over thirty feet in the bluff east of the stream, and appears to run in a northeast course. My explorations were not carried far enough to fully define its course in that direction. Surface specimens of the vein and of the adjacent trap are furnished herewith.

Vein No. 3 cuts the east branch of the creek, and bears north eighty-two degrees east. We opened this vein in four places at the creek, within two hundred feet. It has the appearance of being very much disturbed. On the west side of the stream, it is very compact and filled with quartz-lined cavities interspersed with crystals supposed to be malachite. It dips to the northwest. Specimens from this locality, a full collection of which is furnished, warrant a more thorough examination.

Vein No. 2, before referred to, as showing a breast of thirty feet in the east bluff, appears to branch or to be thrown out about eighty feet in crossing the creek bottom; my limited time and means did not permit me to determine which.

About two hundred feet below the junction of the two branches of the creek it shows at the foot-wall in the bed of the stream. A few feet west of this, the lode rises in the bluff on the west side of the stream. Course of stream at this point north twenty-eight degrees east. Course of vein north forty-two and one-half degrees east. At the junction of the streams, the lode, stripped of its hanging-wall, rises to the top of the cliff, a height of forty or fifty feet.

At this point, we blasted into the lode, and found it rich in copper, some pieces weighing from six to fifteen pounds, and with rich stamp-work. See specimens marked *Vein No. 2, west of stream.*

About fifty feet above the forks of the stream the lode rests upon a bed of conglomerate. This conglomerate is highly metamorphosed, and is amygdaloidal. See specimens.

About one hundred feet west of this, we opened the vein on the brow of the hill. It there shows a breast of twenty feet, and dips to the southeast at an angle of thirty-five degrees.

This location was worked to some extent in the years 1846 and 1847, under a lease from the General Government, by the American Fur Company. They sunk four shafts, but appear to have done very little surface exploring.

Three of these shafts are sunk on the course of Vein No. 1, and from my examination appear to have been perpendicular. Their location is given on the map. The timbering is so much decayed that I did not venture to work in them. From soundings, I found the shaft between the streams forty-six feet deep, the next one on the east side of east branch twenty-eight feet deep, and the one east of section line twenty-eight feet deep. All of them have water to within about twelve feet of the surface. The fourth shaft is sunk at the bend of the east branch. This is thirty-five feet deep, and does not appear from the burrow to have been upon any vein.

The first three shafts above described were sunk perpendicularly upon the outcrop of a vein dipping

thirty-three degrees, and therefore pass into the foot-wall. Had they been continued, they would have cut Vein No. 2. They may perhaps be made available in a further exploration.

Upon the adjoining location, to the westward, is a vein discovered by John Parry, some years ago. I have taken some specimens from it which are herewith furnished. This vein runs north eighty-two degrees east, and intersects your western boundary six chains north of the southwest corner. It appears to be a continuation of Vein No. 3.

At the junction of the trap with the sandstone, in the northwest corner of the location, in the bed of Copper Creek, a bed of bluish-white grindstone grit of first-rate quality is found. The layers are from one inch to several inches in thickness. This white sandstone appears to belong to a different period from the red sandstone of Lake Superior. It only shows to the height of a few feet, and is overlaid by sixty feet of the red sandstone.

In the vicinity of the trap dike it is bent and fractured and considerably hardened. Near the junction, as marked on the map, it is tilted until some of the layers stand perpendicular. There are no ripple-marks on this white sandstone, while the red, resting upon it, shows evidence of a strong current.

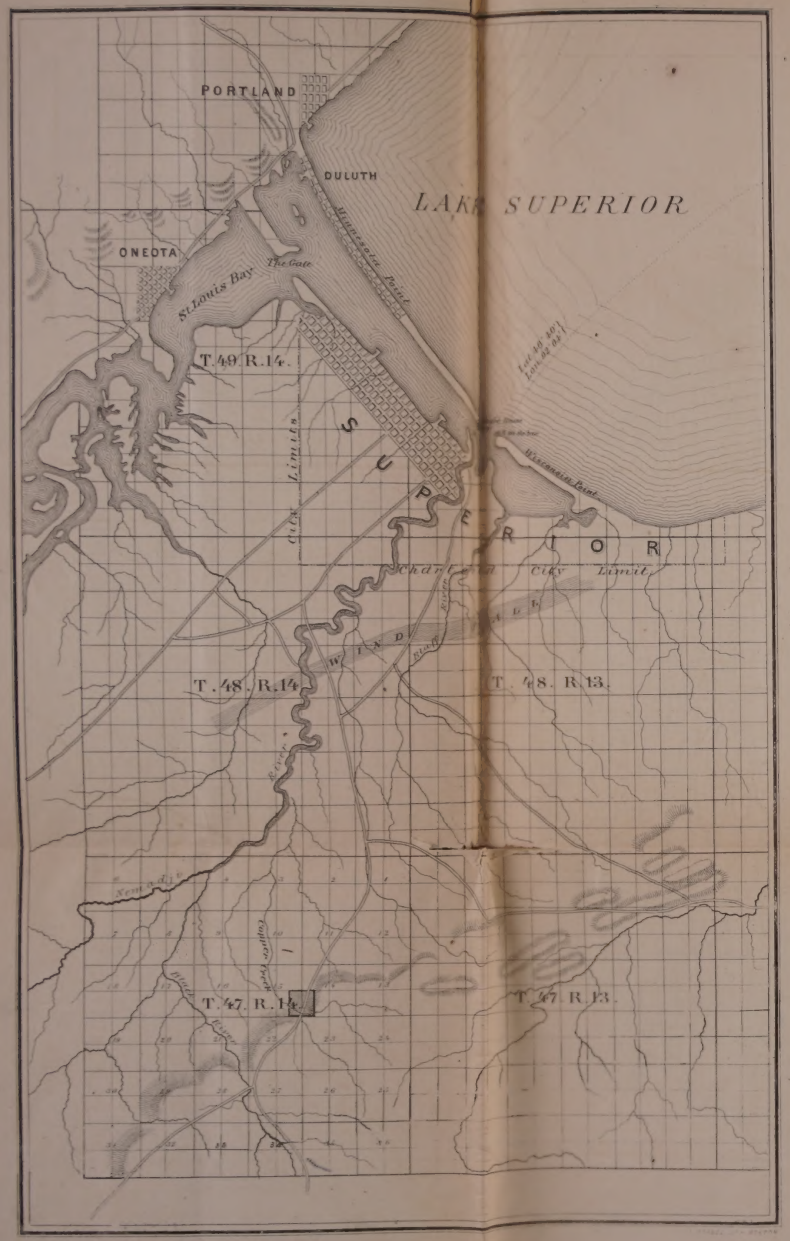
This tract of land is thirteen and one-half miles from the town of Superior, at the west end of Lake Superior. It is on a County Road which has been nearly completed, is now practicable for winter use, and can be made a good summer road at an expenditure not exceeding $2,000.

The soil is a sandy loam, with a subsoil of red clay containing a large per centage of marl, and is quite productive, being capable of producing a large portion of the vegetables needed by the operatives at a mine. It is especially adapted to the cultivation of grass and oats. Timber for lumber and fuel can be obtained conveniently and in unlimited quantity.

Respectfully submitted,

GEORGE R. STUNTZ,

Surveyor in charge of Exploration.



Scale.—4 chains to an inch

COPPER CREEK MINING LOCATION,

160 Acres.